

## DECLARATION FOR PATENT APPLICATION

As a below-named inventor, I hereby declare that:

My residence, post office address and citizenship are as stated next to my name. I believe I am an original, first and joint inventor of the subject matter which is claimed and for which a patent is sought on the invention entitled **TARGET-DEPENDENT REACTIONS USING STRUCTURE-BRIDGING OLIGONUCLEOTIDES**, the specification of which is attached hereto. I hereby state that I have reviewed and understand the contents of the above-identified specification, including the claims, as amended by any amendment referred to above.

I acknowledge the duty to disclose information which is material to the examination of this application in accordance with Title 37, Code of Federal Regulations, § 1.56(a).

I hereby claim foreign priority benefits under Title 35, United States Code, § 119 of any foreign application(s) for patent or inventor's certificate listed below and have also identified below any foreign application for patent or inventor's certificate having a filing date before that of the application on which priority is claimed:

<u>PCT/US98/03194</u>	<u>PCT</u>	<u>05/05/98</u>	<u>Yes</u>
<i>Number</i>	<i>Country</i>	<i>Day/Month/Year Filed</i>	<i>Priority Claimed</i>

I hereby claim the benefit under Title 35, United States Code, § 120 of any United States application(s) listed below and, insofar as the subject matter of each of the claims of this application is not disclosed in the prior United States application in the manner provided by the first paragraph of Title 35, United States Code, § 112, I acknowledge the duty to disclose material information as defined in Title 37, Code of Federal Regulations, § 1.56(a) which occurred between the filing date of the prior application and the national or PCT international filing date of this application:

<u>08/851,588</u>	<u>05/05/97</u>	<u>Pending</u>
<i>Application Serial No.</i>	<i>Filing Date</i>	<i>Patented, Pending or Abandoned</i>
<u>08/934,097</u>	<u>09/19/97</u>	<u>Pending</u>
<i>Application Serial No.</i>	<i>Filing Date</i>	<i>Patented, Pending or Abandoned</i>
<u>09/034,205</u>	<u>03/03/98</u>	<u>Pending</u>
<i>Application Serial No.</i>	<i>Filing Date</i>	<i>Patented, Pending or Abandoned</i>

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment or both, under § 1001 of Title 18 of the United States Code and that such willful false statements may jeopardize the validity of the application or any patent issued thereon.

Full Name of Sole or First Inventor: **Fang Dong**

Inventor's Signature: \_\_\_\_\_  
Residence: 203 Eagle Heights, Madison, Wisconsin 53705  
Post Office Address: 203 Eagle Heights, Madison, Wisconsin 53705

Date: \_\_\_\_\_  
Citizenship: Peoples Republic of China

Full Name of Second Joint Inventor: **Victor I. Lyamichev**

Inventor's Signature: \_\_\_\_\_  
Residence: 2523 Carriedale Court, Madison, Wisconsin 53711  
Post Office Address: 2523 Carriedale Court, Madison, Wisconsin 53711

Date: \_\_\_\_\_  
Citizenship: Russia

Full Name of Third Joint Inventor: **James R. Prudent**

Inventor's Signature: \_\_\_\_\_  
Residence: 3750 Country Grove Drive, Madison, Wisconsin 53719  
Post Office Address: 3750 Country Grove Drive, Madison, Wisconsin 53719

Date: \_\_\_\_\_  
Citizenship: United States of America

Full Name of Fourth Joint Inventor: **Lance Fors**

Inventor's Signature: \_\_\_\_\_  
Residence: 1250 Cloverleaf Drive, Monrovia, California 91016  
Post Office Address: 1250 Cloverleaf Drive, Monrovia, California 91016

Date: \_\_\_\_\_  
Citizenship: United States of America

Full Name of Fifth Inventor: **Bruce Neri**

Inventor's Signature: \_\_\_\_\_  
Residence: 12 Hidden Hollow Trace, Madison, Wisconsin 53717  
Post Office Address: 12 Hidden Hollow Trace, Madison, Wisconsin 53717

Date: \_\_\_\_\_  
Citizenship: United States of America

Full Name of Sixth Joint Inventor: **Mary Ann D. Brow**

Inventor's Signature: \_\_\_\_\_  
Residence: 5905 Hammersley Road, Madison, Wisconsin 53711  
Post Office Address: 5905 Hammersley Road, Madison, Wisconsin 53711

Date: \_\_\_\_\_  
Citizenship: United States of America

Full Name of Seventh Joint Inventor: **Todd A. Anderson**

Inventor's Signature: \_\_\_\_\_  
Residence: 2302 University Ave. #323, Madison, Wisconsin 53705  
Post Office Address: 2302 University Ave. #323, Madison, Wisconsin 53705

Date: \_\_\_\_\_  
Citizenship: United States of America

Full Name of Eighth Joint Inventor: **James E. Dahlberg**

Inventor's Signature: \_\_\_\_\_  
Residence: 1119 Merrill Springs Road, Madison, Wisconsin 53705-1316  
Post Office Address: 1119 Merrill Springs Road, Madison, Wisconsin 53705-1316

Date: \_\_\_\_\_  
Citizenship: United States of America

Applicant / Patentee: Fang Dong *et al.*  
For: **TARGET-DEPENDENT REACTIONS USING STRUCTURE-BRIDGING OLIGONUCLEOTIDES**

**VERIFIED STATEMENT (DECLARATION) CLAIMING SMALL ENTITY STATUS  
(37 CFR § 1.9(c) - SMALL BUSINESS CONCERN)**

I hereby declare that I am an official of the small business concern empowered to act on behalf of the concern identified below:

Third Wave Technologies, Inc.  
502 South Rosa Road, Madison, Wisconsin 53719

I hereby declare that the above-identified small business concern qualifies as a small business concern as defined in 13 CFR §§ 121.3-18, and reproduced in 37 CFR § 1.9(d), for purposes of paying reduced fees under §§ 41(a) and (b) of Title 35, United States Code, in that the number of employees of the concern, including those of its affiliates, does not exceed 500 persons. For purposes of this statement, (1) the number of employees of the business concern is the average over the previous fiscal year of the concern of the persons employed on a full-time, part-time or temporary basis during each of the pay periods of the fiscal year, and (2) concerns are affiliates of each other when either, directly or indirectly, one concern controls or has the power to control the other, or a third party or parties controls or has the power to control both.

I hereby declare that rights under contract or law have been conveyed to and remain with the small business concern identified above with regard to the invention entitled **TARGET-DEPENDENT REACTIONS USING STRUCTURE-BRIDGING OLIGONUCLEOTIDES** by inventors named **Fang Dong *et al.***, described in the specification filed herewith.

I acknowledge the duty to file, in this application or patent, notification of any change in status resulting in loss of entitlement to small entity status prior to paying, or at the time of paying, the earliest of the issue fee or any maintenance fee due after the date on which status as a small entity is no longer appropriate. (37 CFR § 1.28(b)).

I hereby declare that all statements made herein of my own knowledge are true and that all statements made on information and belief are believed to be true; and further that these statements were made with the knowledge that willful false statements and the like so made are punishable by fine or imprisonment, or both, under Section 1001 of Title 18 of the United States Code, and that such willful false statements may jeopardize the validity of the application, any patent issuing thereon, or any patent to which this verified statement is directed.

Date: \_\_\_\_\_

\_\_\_\_\_  
Lance Fors  
President

## ASSIGNMENT

WHEREAS, WE, Fang Dong, Victor I. Lyamichev and James R. Prudent, hereinafter referred to as "ASSIGNOR", have invented certain new and useful improvements as described and set forth in the below-identified application for United States Letters Patent:

Title of Invention: **TARGET-DEPENDENT REACTIONS  
USING STRUCTURE-BRIDGING  
OLIGONUCLEOTIDES**

Filing Date: Serial No.:

WHEREAS, Third Wave Technologies, Inc., a Wisconsin corporation, 502 South Rosa Road, Madison, Wisconsin 53719, hereinafter referred to as "ASSIGNEE", is desirous of acquiring the entire right, title and interest in said invention and application and in any Letters Patent which may be granted on the same;

NOW THEREFORE, TO ALL WHOM IT MAY CONCERN: Be it known that, for and in consideration of the sum of One Dollar (\$1.00) lawful money paid to ASSIGNOR by ASSIGNEE and other good and valuable consideration, receipt of which is hereby acknowledged, ASSIGNOR has sold, assigned and transferred, and by these presents does sell, assign and transfer unto said ASSIGNEE, and ASSIGNEE's successors and assigns, all right, title and interest in and to said invention, said application for United States Letters Patent, and any Letters Patent which may hereafter be granted on the same in the United States and all countries throughout the world including any divisions, renewals, continuations in whole or in part, substitutions, conversions, reissues, prolongations or extensions thereof, said interest to be held and enjoyed by said ASSIGNEE as fully and exclusively as it would have been held and enjoyed by said ASSIGNOR had this assignment and transfer not been made, to the full end and term of any Letters Patent.

ASSIGNOR further agrees that ASSIGNOR will, without charge to said ASSIGNEE, but at ASSIGNEE's expense, cooperate with ASSIGNEE in the prosecution of said application and/or applications; execute, verify, acknowledge and deliver all such further papers, including applications for Letters Patent and for the reissue thereof, and instruments of assignment and transfer thereof; and will perform such other acts as ASSIGNEE lawfully may request, to obtain or maintain Letters Patent for said invention and improvement in any and all countries, and to vest title thereto in said ASSIGNEE, or ASSIGNEE's successors and assigns.

IN TESTIMONY WHEREOF, ASSIGNOR has hereunto signed ASSIGNOR's names to this assignment on the date indicated below.

\_\_\_\_\_  
Fang DONG

\_\_\_\_\_  
Victor I. LYAMICHEV

\_\_\_\_\_  
James R. PRUDENT

\_\_\_\_\_  
Lance FORS

\_\_\_\_\_  
Bruce P. NERI

\_\_\_\_\_  
Mary Ann D. BROW

\_\_\_\_\_  
Todd A. ANDERSON

\_\_\_\_\_  
James E. DAHLBERG

STATE OF \_\_\_\_\_ )

COUNTY OF \_\_\_\_\_ )

ss.

On this \_\_\_\_\_ day of \_\_\_\_\_, in the year of \_\_\_\_\_, before me, the undersigned notary public, personally appeared the above-named ASSIGNOR, known to me (or proved to me on the basis of satisfactory evidence) to be the person whose name is subscribed to the within instrument, and acknowledged that he/she executed the same.

SEAL

\_\_\_\_\_  
NOTARY PUBLIC

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of: Fang Dong *et al.*

Group No.:

Serial No.:

Examiner:

Filed:

Entitled:

**TARGET-DEPENDENT REACTIONS USING STRUCTURE-BRIDGING  
OLIGONUCLEOTIDES**

**POWER OF ATTORNEY BY ASSIGNEE**

Assistant Commissioner for Patents  
Washington, D.C. 20231

Third Wave Technologies, Inc., as Assignee of record of the entire interest of the above-identified patent application, hereby appoints the members of the firm of MEDLEN & CARROLL, LLP, a firm composed of:

Virginia S. Medlen	(Reg. No. 32,050)	Maha A. Hamdan	(Reg. No. 43,655)
Peter G. Carroll	(Reg. No. 32,837)	J. Mitchell Jones	(Reg. No. 44,174)
Kamrin T. MacKnight	(Reg. No. 38,230)	David J. Wilson	(Reg. No. P-45,225)
David A. Casimir	(Reg. No. 42,395)		

as its attorneys with full power of substitution to prosecute this application and transact all business in the Patent and Trademark Office in connection therewith.

Please direct all future correspondence and telephone calls regarding this application to:

Kamrin T. MacKnight	
MEDLEN & CARROLL, LLP	
220 Montgomery Street, Suite 2200	Telephone: 415/705-8410
San Francisco, California 94104	Facsimile: 415/397-8338

I hereby certify that the Assignment document filed with the application or filed subsequent to the filing date of the application, has been reviewed and I hereby certify that, to the best of my knowledge and belief, title is with Third Wave Technologies, Inc.

Dated: \_\_\_\_\_

By: \_\_\_\_\_

Lance Fors  
President  
Third Wave Technologies, Inc.  
502 South Rosa Road  
Madison, Wisconsin 53719